Amendments to the Specification

Please replace the paragraph beginning at page 8, line 12 with the following amended paragraph:

--Fig. 4 is a sectional view of the engine to which a compressor is connected; ~~and~~--

Please replace the paragraph beginning at page 8, line 13 with the following paragraphs:

--Fig. 5a is an illustration of a combustion stroke of cylinder 1 of the engine of Fig. 1;

Fig. 5b is an illustration of a combustion stroke of cylinder 2 of the engine of Fig. 1;

Fig. 5c is an illustration of a combustion stroke of cylinder 3 of the engine of Fig. 1; and

Fig. 5d is an illustration of a combustion stroke of cylinder 4 of the engine of Fig. 1.--

Please delete the paragraph beginning at page 8, line 21 which starts with "[Symbols used on major parts"

Please delete the paragraph beginning at page 9, line 1 which starts with "A detailed description"

Please replace the paragraph beginning at page 9, line 8 with the following amended paragraph:

--Reference is now made to Figure 1, illustrating one embodiment of the present invention. As shown ~~In Fig. 1~~, a plural number of cylinders [[1]] 2 (shown as four cylinders on the drawing, however the engine may include any number of cylinders) are arranged in pairs in two opposing rows on the left and right. That is, respectively, a first cylinder S1, and a third cylinder S3, are arranged side by side as a pair in the opposing direction from the pair of a second cylinder S2 and a fourth cylinder S4, which are also arranged side by side. Situated substantially midway between these two rows of cylinder pairs is a slider 3 which moves transversely left and right on or along a guide rail 4 when the engine is in operation.--

Please replace the paragraph beginning at page 9, line 16 with the following amended paragraph:

--Commonly connected to the slider 3 are rods 2c of pistons 2p within each cylinder [[1]] 2, namely, a first piston P1, a second piston P2, a third piston P3 and a fourth piston P4. Thus, when the pistons P1 and P3 of the left row cylinders S1 and S3 in the drawing move to the right hand bottom dead center (d), the pistons P2 and P4 of the right row cylinders S2 and S4 connected to the slider 3 move toward the top dead center (u), and, conversely, if the pistons of the right row cylinders move toward the left hand bottom dead center (d), the pistons of the left row move toward the top dead centers (u) of the left row cylinders in repeated cycles.--

Please replace the paragraph beginning at page 10, line 1 with the following amended paragraph:

--Thus, when the cylinders on one row undertake the strokes of compression and exhaust simultaneously, the cylinders on the other row undertake the strokes of intake and

~~compression~~ combustion simultaneously.--

Please replace the paragraph beginning at page 11, line 1 with the following amended paragraph:

--(The combustion stroke of cylinder S1)

As shown in Fig. 5A, as the fuel compressed in a previous stroke burns with the ignition by the spark plug P with the fuel valve V1 and the exhaust valve V2 of the cylinder closed, the combustion causes the piston P1 to move right, as viewed on the drawing, toward the bottom dead center (d) and subsequently the slider 3 moves to the right, as viewed on the drawing, on the guide rail 4. By the sliding of the slider 3, piston P2 of cylinder S2, generates ~~an expansion~~ a compression stroke of the fuel previously taken in cylinder S2 by ~~a compression~~ an intake operation. The piston P3 of cylinder S3 undertakes a fuel intake stroke by taking in the fuel through the fuel inlet 2i whose valve V1 is open by suction operation. The piston P4 of cylinder S4 undertakes an exhaust stroke to exhaust the combustion gases from previous stroke through the outlet 2u whose exhaust valve V2 is open by a compression operation.--

Please replace the paragraph beginning at page 11, line 16 with the following amended paragraph:

--(The combustion stroke of cylinder S2)

As shown ~~on~~ in Fig. 5B, when the compressed fuel burns at the ignition by the spark plug P of the cylinder S2, the piston P2 of the cylinder S2 moves left, as viewed in the drawing, toward the bottom dead center (d), to subsequently cause the slider 3 to move to the left, as viewed in the drawing, on the guide rail 4. With this movement of the slider 3, the piston P1 of cylinder S1 undertakes an exhaust stroke with a compression

operation to exhaust the combustion gases produced from a previous stroke through the outlet 2u by an open exhaust valve ~~V1~~ V2. The piston P3 of cylinder S3 goes through the compression stroke to compress the fuel taken in from the previous stroke with the fuel valve V1 and the exhaust valve V2 closed subsequent to a compression operation. The piston P4 of cylinder S4 undertakes the intake stroke in which fuel is taken in through the fuel inlet 2i whose valve is open subsequent to a suction operation.--

Please replace the paragraph beginning at page 12, line 7 with the following amended paragraph:

--(The combustion stroke of cylinder S3)

As ~~illustrated~~ shown in Fig. 5C, when the piston P3 of cylinder S3 reaches the top dead center (u), the compressed fuel burns with the ignition by the spark plug P and the combustion causes the piston P3 to move right, as viewed in the drawing, toward the bottom dead center (d), moving the slider 3 to the right, as viewed in the drawing, on the guide rail 4. This movement is identical to that of the combustion stroke of cylinder S1. This movement of the slider 3 causes the piston P1 of cylinder S1 to go through the intake stroke operation in which fuel is taken in through the fuel inlet 2i whose valve V1 is open by an intake operation. The piston ~~P3~~ P2 of cylinder S2 goes through the exhaust stroke in which the combustion gases from the previous combustion stroke are exhausted through the outlet 2u whose valve V2 is open subsequent to a compression operation. The piston P4 of cylinder S4 performs the compression stroke with its fuel valve V1 and exhaust valve V2 closed by a compression operation.--

Please replace the paragraph beginning at page 12, line 24 (continuing onto page 13) with the following amended paragraphs:

--(The combustion stroke of cylinder 4)

As shown in Fig. 5D, when the piston P4 of cylinder S4 reaches the top dead center (u), the compressed fuel burns with the ignition by a spark plug P and the combustion forces the piston P4 toward the bottom dead center (d) while the slider 3 moves to the ~~right~~ left, as viewed in the drawing, on the guide rail 4. This movement of the slider 3 causes the piston P1 of cylinder S1 to go through the compression stroke in which the fuel taken in from previous stroke is compressed. The piston P2 of cylinder S2 goes through the intake stroke in which fuel is taken in through the fuel inlet 2i whose fuel valve ~~V2~~ V1 is open by the intake operation. The piston P3 of cylinder S3 goes through the exhaust stroke in which the combustion gases from the previous combustion operation are exhausted through outlet 2u whose exhaust valve V2 is open subsequent to a compressive operation.

~~As the ignition time~~ With regard to the ignition timing, the opening and closing time of each fuel valve V1 and exhaust valve V2 and their operation are made in the manner as in known arts of ordinary engines, no separate description is presented here. Thus, while the pistons P1 and P3 of the left row and the pistons P2 and P4 of the right row are always made to move in the same direction by the left-right movement of the slider 3, the pistons' proceeding directions of the left row and the right row to reach the top dead center (u) and the bottom dead center (d) are just in the opposite.--

Please replace the paragraph beginning at page 13, line 20 (continuing onto page 14) with the following amended paragraph:

--Further, by the transverse movement of the slider 3, the eccentric shaft 5s of the crank 5c connected to the slider slot 3h goes through a cross sliding movement wherein the lengthwise and transverse directions alternate and the movement of crank 5c is

converted to circular motion, rotating the flywheel. ~~rotating. As the~~ The rotational inertia of the flywheel 5 helps the crank 5c facilitate the directional turnabout of the slider 3 at both the top dead center (u) and the bottom dead center (d) for each piston. ~~, allowing~~ Allowing the combustion stroke to take place at the moment the directional changeover is consummated, the engine power is increased with no noticeable vibration and the linear motion of the slider is kept smooth. In addition, the level of engine stability is highly enhanced as the stroke length (L) of the piston 2p of every cylinder [[1]] 2 is restricted within a certain limit by the eccentric shaft 5s of the crank 5c.--